

REMARKS

Applicants thank the Examiner for the first complete examination of the instant application. Claims 1-20 are currently pending in the instant application. Reconsideration of this application, as amended, is respectfully requested.

SPECIFICATION OBJECTION

The specification stands objected to by the Examiner. This Amendment attends to various minor informalities found in the originally filed application. Applicants respectfully submit, in accordance with the specification amendments herein, that the specification objection has been obviated. Accordingly, reconsideration and withdrawal of the specification objection are respectfully requested.

DRAWINGS OBJECTION

The drawings stand objected to by the Examiner. In particular, the Examiner notes that the reference numeral 58 was used twice in Figure 2 of the drawings. The Applicants have submitted herewith a Drawing Correction Authorization Request (DCAR) for correcting the minor informality in Figure 2. The correction to Figure 2 is shown in red ink on the marked-up copy of Figure 2 included with the DCAR. In view of the submitted DCAR, Applicants respectfully submit that the drawings objection has been obviated. Therefore, the Examiner is respectfully requested to reconsider and withdraw the drawings objection.

REJECTION UNDER 35 U.S.C. § 103(A)

Claims 1-5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Applicants own disclosure in view Beene, U.S. Patent No. 6,108,183. This rejection is respectfully traversed.

The combination relied upon by the Examiner utilizes disclosure found in the instant application. The disclosure described in the specification and illustrated in Figure 1 is not proper description that may be used in relation to 35 U.S.C. § 102. Instead, the Applicants are clear in indicating that which is illustrated in Figure 1 is merely conventional in nature.

Therefore, the Examiner's combination of the Applicants own disclosure in view of Beene is improper. The Examiner is respectfully requested to reconsider and withdraw the claim rejection of 35 U.S.C. § 103(a).

ALLOWABLE SUBJECT MATTER

The Applicants greatly appreciate the Examiner's indication of allowable subject matter. However, at this time the claims have not been amended as it is respectfully submitted that the current claims are allowable.

CONCLUSION

All of the stated grounds of rejection have been properly traversed, accommodated, and/or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete

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response has been made to the outstanding Office Action, and as such, the present application is condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite the prosecution of this application, the Examiner is invited to telephone Timothy R. Wyckoff (Reg. No. 46,175) at (703) 390-3030 in the Washington D.C. area.


Prompt and favorable consideration of this Amendment is respectfully requested.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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VERSION TO SHOW MARKED-UP CHANGES**IN THE SPECIFICATION**

Please amend the specification as follows:

Pages 6-7, line 3

The circuit configuration of Figure 2 involves the addition of a current limiter in the form of a third servo loop 72 including not only existing Q2 transistor 56 and R3 resistor, but also now OA3 74, Q3 transistor 76, R6 resistor 78, Q4 transistor 80, and R7 resistor 82. The R6 resistor 78 connects the emitter of Q3 transistor 76 to the [Vee] V_{cc} supply potential applied to terminal 28. The OUT terminal of OA1 is now connected to both the base of Q1 transistor 32 and the base of Q3 transistor 76. The base and collector of Q4 transistor 80 are connected to the collector of Q3 transistor 76 via circuit lead 84 and to the (+) input of OA3 74 via circuit lead 86. The output terminal Out of OA3 74 is connected not only back to the (-) input thereof via circuit lead 88, but, more importantly, to the base of Q2 transistor 56 via circuit lead 90. The output of OA2 54 is also connected to the base of Q2 transistor 56 via circuit lead 92 as in the circuit Figure 1. Thus, the outputs of OA2 54 and OA3 74 are connected in parallel to the base of Q2 transistor 56. The latter comprises an important circuit element as will now become evident. It should be noted that in the preferred embodiment of the invention as shown in Figure 2, OA2 and OA3 are operational transconductance amplifiers.

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At rest or in an idle state where I_{dac} is 0, both Q1 transistor 32 and Q3 transistor 76 are in a non-conductive state. This results in zero ($I_{bias}=0$) collector currents of Q1 and Q3

transistors 32 and 76. The OUT output terminal of OA2 connected to the base of Q2 transistor [54] 56 is at V_{cc} , but the base of Q2 is also connected in parallel to the output of OA3 74 whose output is equal to $V_{cc} - V_{be}$ of Q4 transistor [78] 80. This is less than the output of OA2 54. Therefore, the voltage at base of Q2 transistor 56 is at a voltage V_{cc} , causing it to be non-conducting.